

## ABSTRACT

A non-volatile memory (1) which comprises an insulating substrate (11) having a plurality of first electrodes (15) extending therethrough from a front surface of the substrate to a rear surface thereof, a second electrode (12) formed on one surface side of the substrate (11), and a recording layer (14) held between the first electrodes (15) and the second electrode (12) and variable in resistance value by electric pulses applied across the first electrodes (15) and the second electrode (12), the plurality of first electrodes (15) being electrically connected to the recording layer (14) in a region constituting a single memory cell (MC). The non-volatile memory (1) can be reduced in power consumption and has great freedom of design and high reliability.